## DOCUMENT RESUME

ED 040 932

24

SP 003 969

AUTHOR

Johnson, Charles E.; Duncan, Glenn E.

TITLE

Bibliography of Selected References Concerned with the Applications of Systems Technology in Education.

Georgia Univ., Athens. Coll. of Education.

INSTITUTION SPONS AGENCY

Office of Education (DHEW), Washington, D.C. Bureau

of Research.

REPORT NO

GEM-Bull-69-25

BUREAU NO

BR-8-9024

PUB DATE

69

NOTE

17p.; Phase I, Elementary Teacher Education Model

EDRS PRICE

EDRS Price MF-\$0.25 HC-\$0.95

DESCRIPTORS

\*Bibliographies, \*Educational Technology,

Instructional Technology, Systems Analysis, \*Systems

Approach

IDENTIFIERS

Comprehensive Elementary Teacher Education Models

ABSTRACT

This bibliography lists 69 books published since 1960, and 182 journal articles published since 1965, on the subject of applications of systems technology in education. (JS)



GEORGIA EDUCATIONAL MODELS The University of Georgia College of Education Athens, Georgia 30601

BIBLIOGRAPHY OF SELECTED REFERENCES CONCERNED WITH THE APPLICATIONS OF SYSTEMS TECHNOLOGY IN EDUCATION

U.S. DEPARTMENT OF HEALTH, EDUCATION

& WELFARE

OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED

EXACTLY AS RECEIVED FROM THE PERSON OR

ORGANIZATION ORIGINATING IT. POINTS OF

VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDU
CATION POSITION OR POLICY.

GEM Bulletin 69-25

Charles E. Johnson, Ed.D. Glenn E. Duncan, B.S.

1969

PERMISSION TO REPRODUCE THIS CONTRIBUTION MATERIAL HAS BEEN GRANTED BY

TO TRIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE U.S. OFFICE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE CONVICENT OWNER."

Note: This bulletin reports one of a series of investigations designed to develop, evaluate and implement a model teacher education program for the preparation of elementary teachers. This report was prepared pursuant to a contract with the Office of Education, U.S. Department of Health, Education and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy. This bulletin may not be reproduced without permission.

9950035E

## **BCOKS**

- Adams, D. Educational planning. Syracuse, N.Y.: Syracuse Univ., 1965.
- Aerospace Ed. Found. Technology and innovation in education: putting educational technology to work in American schools. New York: Prager, 1968.
- Bisco, R. L. (Ed.) <u>Data Bases</u>, computers, and the social sciences. New York: Wiley, 1970.
- Blang, M. Economics of education: a selected and annotated bibliography. Elmsford, N. Y.: Pergumon, 1966.
- Bonini, C. P. Simulation of information and decision systems in the firm. Chicago: Markham, 1967.
- Boulding, Kenneth. General systems theory-the skeleton of Science.

  Yearbook for the Society for the Advancement of General System
  Theory. Ann Arbor, Michigan: Braun-Brumfield, 1956.
- Bushnell, D. D. Role of the computer in future instructional systems. New York: Johnson Reprint, 1963.
- Caffrey, J. G. The impact of the computer on school systems. Santa Monica, California: System Development Corporation, 1964.
- Caffrey, J. G. Computers and decision making in education. Santa Monica: SDC, 1965.
- Carter, L. F. Computers: Their Impact on instruction, on educational planning, and on the curriculum. Santa Monica: SDC, 1964.
- Carter, L. F. & Silberman, H. H. The system approach, technology and school. Santa Monica: SDC, 1965.
- Charmes, A., & Stedry, A. C. <u>Search-theoretic models of organizational</u> control by budgeted multiple goals. Pittsburgh: Carnegie Institute of Technology, 1964.
- Chestnut, H. Systems engineering methods. New York: Wiley, 1967.
- Chestnut, H. Systems engineering tools. New York: Wiley, 1965.
- Chorofas, D. N. Systems and simulation. New York: Academic Press, 1965.
- Cogswell, J. F., et.al. Construction of the school simulation vehicle. Santa Monica: SLC, 1963.
- Cogswell, J. F. New solutions to implementing instructional media through analysis and simulation of school organization. Santa Monica: SDC, 1964.



- Cogswell, J. F. Construction and use of the school simulation vehicle. Santa Monica: SDC, 1964.
- Cogswell, J. F. System design for a continuous progress school: Part III. Santa Monica: SDC, 1964.
- Cook, D. L. Program evaluation and review technique applications in education. Washington, D. C.: USGPO, 1966.
- Coulson, J. E. & Cogswell, J. F. Systems analysis in education. Santa Monica: SDC, 1965.
- Coulson, J. E. & Cogswell, J. F. Automation, cybernetics, and education. Santa Monica: SDC, 1965.
- Deacon, Amos R. L., Jr. (Ed.) <u>Simulation and gaming: a symposium</u>.

  AMA Management Report No. 55. New York: American Management
  Association, 1961.
- Dommach, D. O., & Lundeman, C. W. Principles underlying systems engineering. New York: Pitman, 1962.
- Egbert, R. L., & Cogswell, J. R. Systems design for a continuous progress school Part I and Part II. Santa Monica; SDC, 1964.
- Evans, R. I., & Lippman, P. K. Resistance to innovation in higher education. San Francisco: Jossey-Bass, 1969.
- Fattu, Nicholas A., & Elam, Stanley (Ed.) Simulation models for education. Bloomington, Ind.: Phi Delta Kappa, Inc., 1965.
- Flagle, Charles D. (Ed.) Operations research and systems engineering.
  Baltimore: John Hopkins Press, 1960.
- Friedman, B. D. <u>Program oritented information</u>. Baltimore: Md. St. Dept. of Ed., 1966.
- Gagne, R. M. <u>Psychological principles in system development</u>. New York: Holt, Rinehart & Winston, 1962.
- Goodlad, J. I., et.al. Computers and information systems in education.

  New York: Harcourt, 1966.
- Gregory, S. A. (Ed.) The design method. New York: Plenum Press, 1966.
- Gross, B. M. Scientific approach to education. <u>National society for</u>
  the study of education yearbook, 1963. Washington, D. C.:
  NSSE, 1964.



- Hirsch, W. A. <u>Integrating view of federal program budgeting</u>. Santa Monica, Calif.: RAND Memo RM 4799, 1965.
- Kershaw, R. L. & McKean, W. P. Systems analysis and education. Santa Monica: RAND Corporation, 1959.
- Knirk, F. G., & Childs, J. W. <u>Instructional technology</u>. New York: Holt, 1968.
- Maccia, G. S. An educational theory model: general systems theory. Bureau of Educational Research and Service. Columbus, Ohio: Ohio State University, 1962.
- Markel, G. A. Towards a general methodology for systems evaluation. State College, Pa.: HRB Singer, Inc., 1964.
- Martin, F. F. Computer mcdeling and simulation. New York: Wiley, 1968.
- McKenny, J. L. <u>Simulation gaming for management development</u>. Cambridge, Mass: Harvard, 1967.
- McMillan, C., & Gonzales, R. F. Systems analysis: a computer approach to decision models. Homewood, Ill.: Irwin, 1965.
- Mize, J. H., & Cox, J. G. <u>Essentials of simulation</u>. Englewood Cliffs, N. J.: Prentice-Hall, 1968.
- Moder, J. J., & Phillips, C. R. Project management with CPM and PERT. New York: Reinhold, 1964.
- Morphet, E. L., et. al. <u>Designing education for the future</u>. (7 vol. series). New York: Citation, 1959.
- Morphet, E. L., & Ryan, C. O. <u>Cooperative planning for education</u>. New York: Citation, 1967.
- Novick, D. (Ed.) Program budgeting. Cambridge, Mass.: Harvard, 1963.
- Ohm, Robert E. The case for simulation: an exploratory model.

  <u>Educational Administration</u>, Spring, 1966.
- Organization for economic cooperation and development. Budgeting program analysis and cost-effectiveness in educational planning. Washington, D. C.: OECD, 1968.
- Orr, W. D. Conversational computers. New York: Wiley, 1968.
- Pfeiffer, J. New look at education: systems analysis in our schools and colleges. New York: Odyssey, 1968.



- Porter, E. H. Managewer development: the system training concept. New York: Harper & Row, 1964.
- Richar: son, R. J. A managerial information system for an elementary school. Pittsburgh: U. of Pittsburgh Learning Rsch. and Devel. Ctr., 1967.
- Rummler, G. A., Yaney, J. P., & Schrader, A. W. Managing the instructional programming effort. Ann Arbor, Mich.: Bureau of Industrial Relations, Graduate School of Eusiness Adm., Univ. of Mich., 1967.
- Ryans, D. G. An information systems approach to education. Santa Monica: SDC, 1963.
- Silberman, H. F. Design objectives of the instructional management system. Santa Monica, Calif: System Development Corporation, 1968.
- Smith, R. G., Jr. An amountated bibliography on the design of instructional systems. Hun RRJ Gec. Washington Univ., 1967.
- Smith, R. G., Jr. <u>Impovations in teaching and training</u>. Detroit: American Data Processing, 1968.
- Smith, R. G., Jr. The design of instructional systems. Hum RRO Tech. Rpt. 66-18. Alexandria, Va.: Goo. Washington Univ., 1963.
- Third international congress on cybernetics. Namur, September 11-15, 1961. Association Internationale de Cybernetique, 1965.
- Tocher, K. D. The art of simulation. London: The English University Press, 1963.
- Tocher, K. D. The art of simulation. Princeton, N. J.: Van Nostrand, 1964.
- UNESCO. Economic and social aspects of educational planning. New York: Unipub., 1965.
- U. S. Air Force. The design of instructional systems. Air Training Command Manual, 52-10. Randolph AFB, Tex., 1967.
- Vaizey, J., & Sheehan, J. Resources for the educator. New York: Humanities, 1968.
- von Bertalanffy, L. General system theory. Yearbook for the society for the anyangement of general systems theory. Ann Arbor, Michigan: Braun-Brumfield, 1956.
- Waldmann, C. H. Making a systems survey. Ideas for Management. T. G. Horti (Ed.) New York: The Macmillan Company, 1960.



- Yett, F. A. Resource allocation processor for the school simulation vehicle pilot version. Santa Monica: SLC, 1964.
- Yett, F. A. Simulating populations--school simulations. Santa Monica: SDC, 1954.
- Zwicky, F., & Wilson, H. G. (Eds.) New methods of thought and procedure. New York: Springer-Verlag, 1967.

## JOURNALS

- Alioto, R. F., & Jungherr, J. A. Using PPBS to overcome tax payers resistance. Phi Delta Kappan, 1969, 51, 138-141.
- Allen, William R., Jr. Report on educational systems engineering.

  <u>American School Board Journal</u>, 1965, 151, 67-69.
- Anderson, G. E. These are the trends to watch in data processing.

  Nation's Schools, 1956, 78, 101-103.
- Anderson, G. E., Jr. Are you ready to learn how operations analysis works? <u>Nation's Schools</u>, 1968, 81, 96.
- Anderson, R. A. Let's look at the instructional systems approach.

  <u>Business Education World</u>, 1967, 47, 19-20.
- Armstein, G. E. Schoolgen: don't boggle at the systems concept: you've probably been using it by a different name. <u>Matien's Schools</u>, 1967, 80, 76-77.
- Ashby, W. R. The cybernetic viewpoint. IEFE Transactions on Systems Science and Cybernetics, 1966, SSC-2, 7-8.
- Au, T. Heuristic approach to systems design. Engineering Education, 1969, 59, 861-65.
- Audiovisual Instruction. Analyzing instructional problems: instructional systems development study, Michigan State University, 1965, 10, 464-465.
- Audiovisual Media. Systems approach and education; symposium, 1969,3,4+.
- Banathy, B. H. Design of foreign language teacher education. The Modern Language Journal, 1968, 42, 490-500.
- Banathy, B. H. Systems approach. The Modern Language Journal, 1967, 51, 281-289.



- Banghart, Frank. A systems approach to simulation of educational administrative decision-making. Georgia Education Bulletin, 1966, 2, 1-15.
- Barson, J. Heuristics of instructional systems development: a team report. Audiovisual Instruction, 1967, 12, 613-614.
- Barsen, J. Standard operating procedures for a learning resources center: a system for producing systems. Audiovisual Instruction, 1965, 10, 378-379.
- Barson, John, Gordon, John M., Jr., & Hornbaker, W. Russell. Standard operating procedures for a learning resource center: a system for producing systems. <u>Audiovisual Instruction</u>, 1965, 10, 378-379.
- Barson, J., & Heinich, R. Systems approach. Audiovisual Instruction, 1966, 11, 431-433.
- Barson, J., & Oxnandler, E. K. Systems: an approach to improving instructions. Audiovisual Instruction, 1965, 10, 360.
- Becher, T. What is educational technology? <u>Times (London) Educational Supplement</u>. 1968, 2769, 1993.
- Berman, A. I. Questions/answers about seminar/autolecture. Audiovisual Instruction, 1968, 13, 847-857.
- Berman, A. I. Seminar autolecture. Today's Education, 1968, 57, 33-36.
- Bern, H. A., & others. Reply to questions about systems. Audiovisual Instruction, 1965, 10, 366-370.
- Bishop, L. J. Systems concept. Educational Leadership, 1967, 24, 676.
- Blaschke, C. L. DOD: catalyst in educational technology. Phi Delta Kappan, 1967, 48, 208-214.
- Block, A. H. Philosophical approaches and the new media. <u>Improving</u>
  College and <u>University Training</u>, 1966, 14, 32-35.
- Bradley, D. M. The systems approach to test evaluation. <u>IEEE Transactions</u> on Systems Science and Cybernetics, 1969, SSC-5, 223-230.
- Boulay, P. C. Tonic or toric? systems analysis. Arizonia Teacher, 1969, 57, 6-9.
- Brown, J. W. Systems solution to college problems. Educational Screen Audiovisual Guide, 1966, 45, 34-36.



- Buley, F. C. Fulti-media for instruction. American Association of Colleges for Teacher Education, 1965, 18, 77-84.
- Buley, H. C. Multimedia systems of instruction. Audiovisual Instruction 1965, 10, 391-392.
- Buskin, M. PPBS means better money management. School Management, 1969, 13, 64-68.
- Canfield, A. A. Instructional systems development. Educational Screen Audiovisual Guide, 1967, 46, 28-29.
- Canfield, A. A. Rationale for performance objectives. Audiovisual Instruction, 1968, 13, 127-129.
- Carbonell, J. R. On man-computer interaction: a model and some related issues. <u>TEEE Transactions on Systems Science and Cybernetics</u>, 1969, SSC-5, 16-26.
- Carver, B. E. Systems concept in business education. <u>Journal of Business</u>
  <u>Education</u>, 1969, 44, 157-159.
- The Catholic School Journal, Electronic learning center, 1966, 66, 32-33.
- Chembers, C. C. Utilization of technology in education -- a fast growing industry. Part 1: the role of computers in education. part 2: systems analysis in education. part 3: managing change. Engineering Education, 1969, 59, 474-509.
- Churchman, C. W. On the design of educational systems. Audiovisual Instruction, 1965, 10, 361-365.
- Ciancone, E. S. New techniques for instructional analysis. <u>Industrial</u>
  Arts and Vocational Education/Technical Education, 1968, 57, 35-39.
- Clark, E. M. Systems approach: What it is and how it applies to Elementary education. The Instructor, 1966, 76, 74.
- Cogswell, J. F. Systems analysis and computer simulation in the implementation of media. <u>Audiovisual Instruction</u>, 1965, 10, 384-386.
- Cohodes, A. Using the systems approach is easier than defining it. Nation's Schools, 1963, 82, 16.
- Costa, A. L. Strategies for developing autonomous learners. Audiovisual Instruction, 1968, 13, 832-834.
- Crossman, D. M. New learning techniques via audio-visual media.

  American School and University, 1968, 38, 115-116.



- Curl, D. H. Self-instructional audiovisual laboratory. Educational Screen Audiovisual Guide, 1967, 46, 24-25.
- Curtis, W. H. Program budgeting design for schools unveiled, with much work still to go: interview. <u>Nation's Schools</u>, 1969, 84, 40-43.
- Decker, E. H. Systems approach: a new educational technique. The Science Teacher, 1968, 35, 26-27.
- Dietrich, J. E., & others. Media development: a part of instructional change. Audiovisual Instruction, 1965, 10, 393-395.
- Dorsey, J. M. Planning programming budgeting (PPB) excerpts. <u>MEA</u>
  <u>Research Bulletin</u>, 1969, 47, 94-95.
- Dyer, H. S. Educational researcher's view of systems analysis. Educational Technology, 1969, 9, 83-85.
- Eash, M. J. Is systems analysis for supervisors? Educational Leadership, 1969, 26, 482-483.
- Eash, M. J. Preparatory programs for supervisors. Educational Leadership, 1966, 23, 358-362.
- Educational Screen Audiovisual Guide. Who will produce the systems?,
- Entwisle, D. R., & Conviser, R. Input-output analysis in education. The High School Journal, 1969, 52, 192-193.
- Eraut, M. R. Instructional systems approach to course development.

  Audiovisual Communication Review, 1967, 15, 92-101.
- Felsenthal, N. Thirteenth okoboji. Audiovisual Instruction, 1968, 13, 160+.
- Fishell, K. N. NDEA: instructional systems approach at Syracuse.

  <u>Audiovisual Instruction</u>, 1966, 11, 808.
- Flanagan, J. C. Functional education for the seventies: project PLAN (program for learning in accordance with needs). Phi Delta Kappan, 1967, 49, 27-33.
- Flanagan, J. C. Project PLAN. Clearning House, 1968, 43, 63-64.
- Freedman, M. Toward a science of educational communications. Audiovisual Instruction, 1969, 14. 112.
- Freeman, W. F. Diagnostic teaching. <u>Audiovisual Instruction</u>, 1968, 13, 858-860.



- Fritz, J. O. Emergence of instructional systems: the educationist's predicament. Canadian Education and Research Digest, 1968, 8, 119-132.
- Furno, O. F. Planning programming budgeting systems: boon or bane? Phi Delta Kappan, 1969, 51, 142-144.
- Geddes, C. L. & Kool, B. Y. Instructional management system for classroom teachers. The Elementary School Journal, 1969, 69, 337-345.
- Giammatteo, M. Systems concepts related to teacher training. The Journal of Teacher Education, 1969, 20, 295-298.
- Gibbs, W. & others. PFDS: what we've learned in one year. Nation's Schools, 1969, 84, 43.
- Gibson, T. L. Instructional systems design through inservice education.

  <u>Audiovisual Instruction</u>, 1968, 13, 710-714.
- Glaspey, J. L. Can mcdern management techniques be applied to education?

  <u>Association of School Business Officials of the United States and Canada, Proceedings</u>, 1967, 53, 254-265.
- Goldberg, A. L. First steps in the systems approach. <u>Audiovisual Instruction</u>, 1965, 10, 382-383.
- Grieder, C. PPBS and assessment: where trouble could errupt. Nation's Schools, 1969, 83, 8.
- Hall, A. D., III. Three dimensional morphology of systems engineering.

  <u>IEEE Transactions on Systems and Cybernatics</u>, 1969, SSC-5, 156-160.
- Haney, J. B., & others. Heuristic dimension of instruction development.

  <u>Audiovisual Communication Review</u>, 1968, 16, 358-371.
- Hanson, C. Grants in the schoolhouse. Phi Dolta Kappen, 1967, 49, 113-114.
- Harmon, P. Developing a training system. Educational Technology, 1969, 9:S, 14-19.
- Hartley, H. J. Limitations of systems analysis. The Education Digest, 1969, 35, 28-31.
- Hartley, H. J. Limitations of systems analysis. Phi Delta Kappan, 1969, 50, 515-519.
- Hartley, H. J. Twelve hurdles to clear before you take on systems analysis. The American School Board Journal, 1968, 156, 16-18.



- Heinich, R. Application of systems concepts to instruction. American Annals of the Deaf, 1966, 111, 603-616.
- Heinich, R. Mediated instruction: an alternative to classroom instruction. Theory into Practice, 1968, 7, 146-148.
- Hill, E. K. & Bergstrom, P. G. Big ideas for small schools. <u>Industrial</u>
  Arts and Vocational Education/Technical Education, 1968, 57, 6+.
- Hoban, C. F. OR and curriculum planning. Audiovisual Instruction, 1968, 13, 263-266.
- Hodges, L. C. & Silver, G. A. Quickening pulse of industrial education. School Shop, 1938, 27, 68-71.
- Hurwitz, F. L. What kind of a design. Adult Leadership, 1968, 17, 55-56.
- Industrial Simulation: Lock before you leap. Iron Age, 1965, 196, 54.
- International Review of Education. Plans for an electronic communications network; educational communications system, 1966, 12-2, 219-220.
- Joyce, B. Principal and his staff: the multiple systems approach to curriculum. The National Elementary Principal, 1968, 48, 24-29.
- Joyce, B. R. Development of teaching strategies. <u>Audiovisual Instruction</u>, 1968, 13, 820-827.
- Kapfer, P. G. Practical approaches to individualizing instruction. Educational Screen Audiovisual Guida, 1968, 47, 14-16.
- Kassay, J. Self-instructional systems bibliography. The Journal of Arts Education, 1969, 29, 35-40.
- Katzenbach, E. L. Increasing influence of the company classroom. American Vocational Journal, 1968, 43, 18-20.
- Kaufman, R. A. Toward educational systems planning: Alice in education-land. Audiovisual Instruction, 1969, 14, 47-48.
- Knirk, F. G. Analysis of instructional systems: a reaction to the May issue. <u>Anaiovisual Instruction</u>, 1965, 10, 648-649.
- Koenig, H. E. A systems model for management, planning, and resource allocation in institutions of higher education. <u>Journal of Engineering Education</u>, 1969, 59, 963-971.
- Kong, S. L. Education in the cybernetic age: a model. Phi Delta Kappan, 1967, 49, 71-74.



- Kopp, H. G. Application of systems concept to teaching the deaf.

  American Annals of The Deaf, 1966, 111, 668-677.
- Kornblum, Richard D. Systems simulation—a unique management tool. Food Engineering, 1962, 34, 52-54.
- Kraft, R. H. P. & Latta, R. F. Systems engineering techniques: embarrassment or opportunity for today's educators? <u>Educational</u> <u>Technology</u>, 1969, 9, 26-30.
- Kristy, N. F. Future of educational technology. <u>Phi Delta Kappan</u>, 1967, 48, 240-243.
- Lange, P. C. Technology, learning & instruction. Audiovisual Instruction, 1968, 13, 226-231.
- Lave, R. E., Jr., & Kyle, D. W. Application of systems analysis to educational planning. Comparative Education Review, 1968, 12, 39-55.
- Lehmann, H. Systems approach to education; project ARISTOTIE. Audiovisual Instruction, 1968, 13, 144-148.
- Lewis, F. J., Jr. & Pinkau, I. Societal engineering: a new career for societal systems. <u>Journal of Engineering Education</u>, 1969, 59, 111-114.
- Lewis, P. ETV: how to put together a communications systems. Nation's Schools. 1965, 76, 49-57.
- Lewis, P. Instructional technology: the systems approach for business education. National Business Education Yearbook, 1965, 3, 33-43.
- Linvill, W. K. Mcdels and model construction. IRE Transitions on Education, 1962, E-5, 64-67.
- Loughary, J. W. God of complexity. Educational Technology, 1969, 9, 23-25.
- Lougháry, J. W. Instructional systems: magic or method? <u>Educational</u> <u>Leadership</u>, 1968, 25, 730-734.
- Mager, R. F. Engineering of behavior. Engineering Education, 1969, 59, 841-843.
- Manning, W. R. Cost analysis and curriculum decisions. Educational Leadership, 1969, 27, 179+.
- Mauch, James. A systems analysis approach to education. Phi Delta Kappan, 1962, 43, 158-162.



- Maus, C., & others. Admissions problems as they relate to systems and procedures. College and University, 1968, 43, 599-601.
- McGivney, J. H. PPBS: a rational approach to decision-making. American Vocational Journal, 1969, 44, 63-65.
- McIsages, D.N., Jr. PERT and school construction. <u>Nation's Schools</u>, June 1964.
- McMahan, M. Challenge: the systems approach in development of media competencies. Audiovisual Instruction, 1967, 12, 1060-1063.
- Meals, D. W. Heuristic models for systems planning. Phi Delta Kappan, 1967, 48, 199-203.
- Miller, R. I. Systems approach. <u>Educational Screen Audiovisual Guide</u>, 1967, 46, 28-29.
- Minor, F. J., & others. Experimental computer-based educational and career exploration systems. <u>Personnel and Guidance Journal</u>, 1969, 47, 564-549.
- Mood, A. M. Macro-analysis of the American educational syste.

  <u>Operations Research</u>, 1969, 17, 770-784.
- Morgan, R. M. ES'70: a systematic approach to educational change. Educational Technology, 1969, 9, 49-54.
- Morrell, L. R. Look at program budgeting: planning programming budgeting system (PPBS). Educational Record, 1969, 50, 286-289.
- Naddor, E. A methodology for computer-aided laboratories. Engineering Education, 1969, 59, 858-860.
- Nation's Schools. Systems approach spreads from industry to public schools: special report. Nation's Schools, 1967, 80, 57-78.
- Neff, M. C. Materials systems for basic adult education. <u>Audiovisual Instruction</u> 1966, 11, 246-248.
- Nelson, J. L. Systems theory. Social Education, 1969, 33, 225-227.
- Olende, S. A. Systems approach: some general considerations. <u>IEEE</u>
  <u>Transitions on Education</u>, 1969, E-12, 138-39.
- Oxhandler, E. K. Afterthoughts on a systems conference. Audiovisual Instruction, 1965, 10, 395-397.



- Paltridge, J. G. Toward a systems model for state coordination. Educational Record, 1969, 50, 71-77.
- Persselin, L. E. Systems implications for secondary education. <u>Journal</u> of <u>Secondary Education</u>, 1969, 44, 159-166.
- Pffeiffer, J., & Wilson, C. H. Do schoolmen have to learn systems analysis to survive? review of new look at education. Nation's Schools, 1969, 83, 22.
- Phillips, M. G. Learning materials and their implementation: the instructional systems concept. Review of Educational Research, 1966, 36, 374.
- Rath, G. J. Constraints to educational systems design. Educational Technology, 1969, 9, 77-78.
- Richardson, R. J. Information system for individualized instruction in an elementary school. <u>Educational and Psychological Measurement</u>, 1969, 29, 199-201.
- Rider, G. S., & Martinez, G. Title I and remedial reading for disadvantaged students. California Journal of Educational Research, 1969, 20, 31-39.
- Ridgeway, J. Computer-tuter: competition for public education? The Education Digest, 1966, 32, 7-10.
- Robertson, L. Total system approach to business education. Business Education Forum, 1966, 21, 19-20.
- Roe, A. Symposium on the application of technology to education. Engineering Education, 1969, 59, 472-473.
- Root, A. A. Preview of systems approach to education. Engineering Education, 1969, 59, 836.
- Root, A. A. Teaching as decision making. <u>Engineering Education</u>, 1969, 59, 850-851.
- Rowntree, D. Beyond programmes. <u>Times (London) Educational Supplement</u>, 1968, 2766, 1765.
- Ruark, H. C. IMC systems approach: allies or adversaries? Educational Screen Audiovisual Guide, 1966, 45, 19.
- Ruark, H. C. That does not compute! Educational Screen Audiovisual Guide, 1967, 46, 18-19.



- Ruark, H. H., & Wenger, D. A. DAVT's depth, diversity, dynamics. Educational Screen Audiovisual Guide, 1966, 45, 28-30.
- Ruark, H. C., Jr. Let's get the jcb done, but watch where we're going. Educational Screen Audiovisual Guide, 1958, 47, 134.
- Sanders, D. P. Toward a theory of educational development. Comparative Education Review, 1969, 13, 276-293.
- Schlunz, F. C., others. Need for and use of systems staff. College and University, 1963, 43, 603-607.
- School and Society. Educational communications system for colleges, 1965, 93, 422.
- School Management. Administration: decentralization. sharpens staff performance, 1968, 12, 45-48.
- Schure, A. Educational escalation through systems analysis; project ULTRA at New York Institute of Technology. <u>Audiovisual Instruction</u>, 1965, 10, 371-377.
- Silberman, C. E. Technology knocking at the schoolhouse door. Fortune, Aug. 1966, 120.
- Silver, G. A. Bold advances in audiovisual instruction. School Shop, 1967, 26, 73-75.
- Silvern, L. C. Cybernetics and education.-12. Audiovisual Instruction, 1968, 13, 267-272.
- Smith, D. C. Preparation of college teachers: towards a rationale for instruction. Canadian Education and Research Digest, 1968, 8, 230-244.
- Smith, L. M. Model for evaluating achievement. <u>Canadian Education and</u>
  Research Digest, 1968, 8, 73-77.
- Smith, T. W. Development of a research-based and computer assisted guidance system. <u>Educational Leadership</u>, 1968, 25, 754-760.
- Sobol, T. How we planned our dial-ascess system: Fox Lane middle school in Bedford, N.Y. <u>Nation's Schools</u>, 1966, 78, 74-77.
- Stewart, D. K. Articulated instructional media program at the University of Wisconsin. Audiovisual Instruction, 1965, 10, 380-382.
- Stolurow, L. M. Defects and needs SOCRATES a computer based instructional system in theory and research. The Journal of Experimental Education, 1968, 37, 102-117.



- Szuberia, C. A. How to ease into PPBS. The American School Board Journal, 1969, 156, 20.
- Taft, N. I. A systematic method for evaluating teachers. Engineering Education, 1969, 59, 852-857.
- Tanner, C. K. Techniques and application of educational systems analysis: PERT linear programing and utility cost sensititivity analysis.

  Audiovisual Instruction, 1969, 14, 89-90.
- Temmer, H. Topless management or the anatomy of data systems. College and University, 1969, 44, 213-219.
- Thomson, S. D. Systems analysis and public education: symposium; with introduction. Journal of Secondary Education, 1967, 42, 243-266.
- Times (London) Educational Supplement. Multi-Media presentation, 1966, 2655, 1094.
- Tirrell, J. E. Total! independent study at Oakland: Oakland Community College in Michigan seeks to develop a new learning model. Junior College Journal, 1966, 36, 21-23.
- Tischler, M. Systems approach; modern technology in skills training.

  Industrial Arts and Vocational Education/Technical Education,

  1968, 57, 45-47 S, 25+, 31-33 N.
- Tonne, H. A. Systems approach; old wine in new bottles? <u>Journal of Business Education</u>, 1967, 43, 8-9.
- Tosti, D. T., & Ball, J. R. Behavioral approach to instructional design and media selection. Audiovisual Communication Review, 1969, 17, 5-25.
- Van Dusseldorp, R. A. Systems approach. NEA Journal, 1967, 56, 24-26.
- Vento, C. J. Media distribution system of the future. Audiovisual Instruction, 1968, 13, 1073-1081.
- Vidale, R. F. Some cautions in applying systems analysis to education. Engineering Education, 1969, 59, 837-840.
- von Bertalanffy, L. An outline of general system theory. British Journal of the Philosophy of science, 1950, 1, 134.
- Wales, C. E. Educational systems design. Engineering Education, 1969, 59, 844-849.
- Watson, P. G. Instructional strategies and learning systems. Audiovisual Instruction, 1968, 13, 842-846.



- Wayne, E. R. V.T.R.S. and instructional system. Audiovisual Instruction, 1966, 11, 752+.
- Weisgerber, R. A. Newest school system. Clearning House, 1966, 41, 126-127.
- Weisgerber, R. A. PLAN is a project halfway there. Educational Screen Audiovisual Guide, 1969, 48, 12-13.
- Weisgerber, R. A., & Rahmlow, H. F. Individually managed learning: project PLAN. Audiovisual Instruction, 1968, 13, 835-839.
- Wilbur, A. M. Saginaw: transmission system may be woven into carpating: individual communications system (INDICOM). Nation's Schools, 1966, 78, 91-92.
- Wilsey, C. E. Program budgeting: an easy guide with the confusion removed. The American School Board Journal, 1969, 156, 16-19.
- Wilson, Frank C. Simulation: good way to cut risks in management decisions. <u>Textile World</u>, 1964, 114, 170-173.
- Witherspoon, J. P. Educational communications systems: a whole problem lock at transmission requirements of education. <u>Audiovisual Instruction</u>, 1966, 11, 10-12.
- Withrow, F. B. Mediated learning. The Volta Review, 1968, 70, 453-457.

